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HP 10014274-1  
PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Inventors: Arlen L. Roesner, et al.

Serial No.: 10/017,543

Art Unit: 2835

Filed: December 13, 2001

Examiner: Chervinsky, Boris L.

Title: THERMAL INTERFACE

#11/Reply  
Brief  
R.T.  
5/8/03

REPLY BRIEF

(37 CFR 1.193(b)(1))

This brief is in reply to the Examiner's Answer dated March 26, 2003.

Appellant's "Brief on Appeal" pointed out the Examiner's error in the final Office Action equating dry phase-change interface material with pliable thermal compound interface material such as silicone grease based on an erroneous reading of the Green reference. It is submitted that the Examiner's Answer has further misconstrued Green.

First, the Examiner's Answer, at page 3 thereof, quotes the following from Green:

In certain applications, heat spreaders may be employed along the thermal path to achieve certain heat dissipating objectives, and interface coatings of the present invention may be employed along the surfaces of heat spreaders as well. (Green, col. 2, lines 33-37).

It is then asserted that the above statement (and the preceding statement in column 2, lines 26-31) "indicates that

silicone grease is one of such thermal spreaders" (Examiner's Answer, page 3; underlining supplied).

This assertion is flatly wrong. It is clear from the very statement cited by the Examiner that an interface coating and a heat spreader are two different things. Although the statement speaks for itself, Fig. 3 of Green illustrates the distinction. That figure shows an interface coating 36 interposed between a metal heat spreader 34 and a heat sink 35. Manifestly, the interface coating 36 and metal heat spreader 35 are two separate and distinct elements.

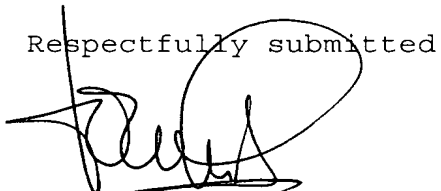
In summary:

- (1) a dry phase-change interface material is not the same thing as a pliable thermal compound such as silicone grease; and
- (2) a silicone grease interface is not the same thing as a heat spreader.

By equating these materials and elements, the Examiner has reconstructed Green; that reconstruction, which underlies the rejections of the claims, is submitted to be in error.

The rejections should be reversed and claims 1-30 should be allowed.

Respectfully submitted,



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Dated: April 30, 2003

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